

Serial No. **10/813,113**
Amdt. dated March 4, 2010
Reply to Office Action of October 5, 2009

Docket No. **P-0581**

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) The method of claim 34, comprising:

downloading broadcasting program information before storing the broadcasting program information in the mobile terminal;

converting the stored broadcasting program information into data information to be displayed on a screen of the mobile terminal and then outputting the data information to the screen of the mobile terminal;

providing for searching of the broadcasting program information displayed on the screen;

and

performing the reservation-recording by receiving a user's input via the reservation-recording key of the mobile terminal based on the searched broadcasting program information.

2. (Previously Presented) The method of claim 1, wherein performing the reservation-recording includes:

transmitting the reservation-recording information to an event timer of the recording apparatus in response to the input of the reservation-recording key of the mobile terminal; and

storing the transmitted reservation-recording information in the event timer of the recording apparatus, operating the event timer at a preset reservation time based on the reservation-recording information, thereby turning on power of the recording apparatus, and performing the reservation-recording.

3. (Previously Presented) The method of claim 1, wherein in performing the reservation-recording, the broadcasting program information selected by a user among the displayed broadcasting program information is wirelessly transmitted to the recording apparatus.

4. (Previously Presented) The method of claim 1, wherein in downloading the broadcasting program information and storing, the broadcasting program information is downloaded through a broadcasting program data service provider's Internet homepage.

5. (Previously Presented) The method of claim 1, wherein in downloading the broadcasting program information and storing, the broadcasting program information is directly downloaded from a broadcasting receiver where broadcasting program information is stored.

6. (Previously Presented) The method of claim 1, wherein in outputting the data information to the screen, icons are generated on the basis of the stored broadcasting program information and displayed on the screen.

7. (Previously Presented) The method of claim 6, wherein if one of the displayed icons is selected, broadcasting channel information, broadcasting time information, and broadcasting program information according to each channel and time are displayed in a list form.

8. (Previously Presented) The method of claim 7, wherein in performing the reservation-recording, when a user selects an arbitrary broadcasting program, broadcasting channel information and broadcasting time information corresponding to a title of the selected broadcasting program are displayed enlarged, and a guide message inquiring whether the information is to be set as the reservation-recording information is displayed.

9. (Previously Presented) The method of claim 1, wherein in providing for searching of the broadcasting program information, if an electric program guide (EPG) is provided as the broadcasting program information, a channel is set by inputting an up/down key of the mobile terminal when the channel inside the EPG is highlighted.

10. (Previously Presented) The method of claim 9, wherein in providing for searching of the broadcasting program information, a software channel management for the broadcasting program information is provided to the mobile terminal to compare a channel set by a user with

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channel information of the program guide and to perform a channel search among substantial active channels.

11. (Previously Presented) The method of claim 1, wherein the mobile terminal downloads broadcasting program information through a broadcasting receiver that receives broadcasting program information, stores the broadcast program information in a memory, and performs a search and the reservation-recording of the broadcasting program information.

12. (Previously Presented) The method of claim 1, wherein the mobile terminal accesses to a wireless Internet network through a mobile communication module, to download a broadcasting program from a broadcasting program service provider's Internet homepage and store the program in a memory, and then performs a search and the reservation-recording of the program.

13. (Previously Presented) The method of claim 35, further comprising:
transmitting the packetted reservation-recording information to a subscriber's server through a wireless Internet network

14. (Previously Presented) The method of claim 13, wherein performing the reservation-recording includes turning on power of the recording apparatus through a wakeup LAN.

15. (Previously Presented) The method of claim 13, wherein in performing the reservation-recording, the reservation-recording information is stored by an event timer including a non-volatile memory, power of the recording apparatus is turned on at a preset reservation time of the broadcasting program on the basis of the reservation-recording information, and a reservation-record is performed.

16. (Previously Presented) The method of claim 13, wherein the transmission packet includes a packet header that informs of a data content, a subscriber's code that informs of subscriber's information, the reservation-recording information, and the subscriber's IP information.

17. (Previously Presented) The method of claim 16, wherein the reservation-recording information includes channel information that performs the reservation-recording, time information regarding reservation start time and reservation finish time, and category information including a program list.

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18. (Previously Presented) The method of claim 13, wherein the transmission packet includes a packet header that informs of a data content, the subscriber's mobile terminal information, the reservation-recording information, and modem information when the recording apparatus is connected to the Internet by a telephone wire.

19. (Currently Amended) A broadcasting program reservation-recording system using a mobile terminal, the system comprising:

a CDMA module provided with a mobile communication module that receives broadcasting program information;

a remote communication controller that exchanges data with a recording apparatus or performs a wireless communication in order to control the recording apparatus;

a storage device that stores broadcasting program information received through the CDMA module and control data for the recording apparatus received by the remote communication controller;

a controller that converts the broadcasting program information stored in the storage device into data information of a suitable form to be displayed and output; and

a display device that displays data information regarding the broadcasting program information output from the controller on a screen, wherein the system is configured to transmit a radio frequency signal or an infrared signal corresponding to a reservation-recording information from the mobile terminal to the recording apparatus based on a reservation-

recording key of the mobile terminal to perform power management of the recording apparatus and a reservation-recording in the recording apparatus based on the reservation-recording information, and wherein the recording apparatus comprises an event timer that receives power through a battery and turns on power of the recording apparatus at a preset reservation time based on the reservation-recording information.

20. (Previously Presented) The system of claim 19, further comprising a key input device that receives a user's selection of the data information displayed on the screen.

21. (Previously Presented) The system of claim 19, wherein the controller comprises:
a CPU that generates icons for searching or controlling the broadcasting program information based on the data stored in the storage device and outputs the generated icons on the screen of the mobile terminal; and
a companion chip that controls an operation of the remote communication controller through an interface with the CPU.

22. (Previously Presented) The system of claim 19, wherein the controller sets an arbitrary broadcasting program selected by a user among the broadcasting program information displayed on the display device in the recording apparatus as the reservation-recording information.

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23. (Previously Presented) The system of claim 21, wherein the remote communication controller comprises:

a remote control module that outputs a remote control signal in response to a remote control command for the recording apparatus provided from the companion chip connected to the CPU; and

a transmitter/receiver that performs a wireless data communication link with the recording apparatus by receiving the remote control signal from the remote control module.

24. (Previously Presented) The system of claim 23, wherein the transmitter/receiver comprises:

an infrared transmitter and an infrared receiver (IR transmitter/receiver) for that provides an infrared wireless data communication link; and

a radio frequency data communication link (RF transmitter/receiver) that provides a high frequency wireless data communication link.

25. (Previously Presented) The system of claim 19, wherein the display device comprises:

a video controller;

an audio codec;

a liquid crystal display (LCD) screen;

a speaker; and

a microphone.

26. (Currently Amended) A broadcasting program reservation-recording system using a mobile terminal, the system comprising:

a service center that provides broadcasting program information;

a mobile terminal that allows for searching of a broadcasting program by downloading broadcasting program information from the service center and that transmits a radio frequency signal or an infrared signal corresponding to a reservation-recording information from the mobile terminal to a recording apparatus based on a reservation-recording key of the mobile terminal to perform power management of the recording apparatus and a reservation-recording in the recording apparatus based on the reservation-recording information; and

the recording apparatus that reservation-records the broadcasting program provided from the service center based on the output reservation-recording information received from the mobile terminal, wherein the recording apparatus comprises an event timer that receives power through a battery and turns on power of the recording apparatus at a preset reservation time based on the reservation-recording information.

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27. (Previously Presented) The system of claim 26, further comprising a mobile communication station that provides a wireless communication device between the service center and the mobile terminal.

28. (Previously Presented) The system of claim 26, wherein the service center includes information of the mobile terminal and Internet access information of the recording apparatus.

29. (Previously Presented) The system of claim 28, wherein the Internet access information includes IP address information of the recording apparatus when the recording apparatus is connected to the Internet by an Ethernet, and includes telephone number information when the recording apparatus is connected to the internet by a telephone wire.

30. (Previously Presented) The system of claim 29, wherein the recording apparatus is provided with a wakeup LAN module to turn on the recording apparatus at a time of an external data communication request.

31. (Previously Presented) The system of claim 30, wherein the wakeup LAN module comprises:
a system bios device including control information that controls a power of the recording apparatus;

a physical layer device that performs an interface with the system bios device in response to the external data communication request; and
a backup battery that provides a power to the physical layer device and the system bios device.

32. (Canceled).

33. (Previously Presented) The system of claim 31, wherein the system bios device includes a power management logic device that stands by with an operation-enable state by receiving a minimum power from the backup battery.

34. (Currently Amended) A method for reservation-recording a broadcasting program, the method comprising:

storing broadcasting program information in a mobile terminal; and
transmitting a radio frequency signal or an infrared signal corresponding to a reservation-recording information from the mobile terminal to a recording apparatus based on a reservation-recording key of the mobile terminal ~~to perform, wherein the recording apparatus comprises an event timer that receives power through a battery and turns on power management of the recording apparatus at a preset reservation time based on the reservation-recording information;~~
~~and~~

performing a reservation-recording in the recording apparatus based on the reservation-recording information when the recording apparatus is in a power-on state.

35. (Currently Amended) A method for reservation-recording a broadcast program using a mobile terminal, the method comprising:

searching broadcasting program information in a mobile terminal; and
transmitting a reservation-recording information with a subscriber's IP address in a transmission packet form to perform power management of the a recording apparatus, wherein the recording apparatus comprises an event timer that receives power through a battery and turns on power of the recording apparatus at a preset reservation time based on the reservation-recording information; and

performing a reservation-recording in the recording apparatus based on the reservation-recording information, wherein a radio frequency signal or an infrared signal corresponding to the reservation-recording information is transmitted to the recording apparatus by selecting a reservation-recording key of the mobile terminal based on the searched broadcasting program information.

36. (Currently Amended) A recording apparatus, comprising:

a receiver configured to receive a radio frequency signal or an infrared signal corresponding to a reservation-recording information via a reservation-recording key of a mobile terminal; and

an event timer configured to store the reservation-recording information and to perform a power management of the recording apparatus and a reservation-recording at a preset reservation time based on the reservation-recording information, wherein the event timer receives power through a battery and turns on power of the recording apparatus at the preset reservation time based on the reservation-recording information.

37. (Canceled).

38. (Previously Presented) The recording apparatus of claim 36, wherein the event timer comprises a non-volatile memory.

39. (Previously Presented) The recording apparatus of claim 36, wherein the event timer receives power via a back-up battery.

40. (Currently Amended) A recording apparatus, comprising:

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a receiver configured to receive a radio frequency signal or an infrared signal corresponding to a reservation-recording information via a reservation-recording key of a mobile terminal; and

~~a LAN wakeup module configured to turn on the recording apparatus upon receipt of the reservation-recording information~~

~~an event timer that receives power through a battery and turns on power of the recording apparatus at a preset reservation time based on the reservation-recording information.~~

41. (Currently Amended) The recording apparatus of claim 40, wherein the ~~wakeup LAN module event timer~~ comprises:

a system bios device including control information that controls a power of the recording apparatus;

a physical layer device that performs an interface with the system bios device in response to the receipt of the reservation-recording information; and

a backup battery that provides a power to the physical layer device and the system bios device.

42. (Previously Presented) The recording apparatus of claim 41, further comprising a power controller that turns on/off a power of the recording apparatus based on the power control information of the system bios device.

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43. (Previously Presented) The recording apparatus of claim 41, wherein the system bios device includes a power management logic device that stands by with an operation-enable state by receiving a minimum power from the backup battery.